



RELEASED

UNITED STATES GENERAL ACCOUNTING OFFICE

WASHINGTON, D.C. 20548

July 10, 1985  
**RESTRICTED** — Not to be released outside the General Accounting Office except on the basis of specific approval by the Office of Congressional Relations.

RESOURCES, COMMUNITY,  
AND ECONOMIC DEVELOPMENT  
DIVISION

B-219118

The Honorable Mike Synar  
Chairman, Subcommittee on Environment,  
Energy, and Natural Resources  
Committee on Government Operations  
House of Representatives



127614

Dear Mr. Chairman:

Subject: Synthetic Fuels Corporation's Profit-Sharing  
Provisions with Six Proposed Projects  
(GAO/RCED-85-140)

On October 26, 1984, you requested that we review the U.S. Synthetic Fuels Corporation's (SFC's) methodology for estimating federal receipts anticipated from profit-sharing provisions in proposed financial assistance agreements between SFC and sponsors of synthetic fuels projects. In subsequent discussions with your office, we agreed to

- compare SFC's original profit-sharing revenue projections with the sponsors' projections for six projects;
- compare SFC's original profit-sharing revenue projections with its January 1985 revenue projections;
- convert the January 1985 profit-sharing revenue projections into their present-discounted value;
- compute the potential net effect on the U.S. Treasury that could result from the proposed financial assistance agreements. For such an assessment we would consider federal outlays from price guarantee payments, project tax credits, and federal receipts from profit sharing and project income taxes (also converted into present-discounted value);
- compare SFC's income tax projections for two projects, which were based on the 46-percent maximum corporate tax rate, with revised projections that use the sponsors' average effective tax rates for the 3-year period 1982 through 1984; and

532637

(308764)

--compare SFC's future energy price forecasts with forecasts by recognized econometric firms and the Department of Energy (DOE).

To achieve these objectives, we interviewed SFC officials, examined the six proposed financial assistance agreements, reviewed SFC's computer-based analyses used to support the assistance proposals, and obtained corporate tax information on two projects' sponsors from the Securities and Exchange Commission. At our request, SFC reanalyzed the six financial assistance agreements using its computer model and January 1985 energy price forecasts and other economic assumptions. The views of directly responsible officials were sought during the course of our work and are incorporated in the report where appropriate. As requested by your office, we did not request that SFC review and comment officially on a draft of this report. (See the enclosure for a more detailed explanation of our objectives, scope, and methodology.)

#### BACKGROUND

The Energy Security Act of 1980 (Public Law 96-294) established SFC to provide financial assistance to private industry to undertake commercial-size projects that produce synthetic fuels. Between July 1983 and April 1984, SFC signed or authorized letters of intent to provide a maximum of about \$6.8 billion in price guarantees to eight synthetic fuels projects. Subsequently, two projects' sponsors withdrew. These letters of intent are non-binding agreements documenting, among other things, the financial terms and conditions negotiated by SFC and the projects' sponsors. As of June 1, 1985, SFC's Board of Directors was reviewing the letters of intent and related information to determine the merits of funding the six projects.

Table 1 shows summary information on each of the six projects.

Table 1

<u>Project name and location</u>	<u>Letter of intent date</u>	<u>Project type</u>	<u>Original price guarantee estimated outlays</u>	<u>January 1985 price guarantee estimated outlays</u>
----- (millions) -----				
Great Plains Coal Gasification Beulah, ND	4/26/84	Lignite coal gasification	\$ 790.0	\$ 790.0
Union Oil Parachute Creek Shale Program, Phase II Parachute, CO	12/01/83	Oil shale	2,700.0	2,700.0
Cathedral Bluffs Rio Blanco, CO	7/28/83	Oil shale	1,816.9	2,023.1
Northern Peat Milford, ME	4/26/84	Wet carboni- zation of peat	365.0	365.0
Forest Hill Wood County, TX	4/05/84 <sup>a</sup>	Heavy oil	60.0	59.9
Seep Ridge Uintah County, UT	6/22/84	Oil shale	<u>44.5</u>	<u>45.0</u>
Total			<u>\$5,776.4</u>	<u>\$5,983.0</u>

<sup>a</sup>Authorized but not signed.

#### PROFIT-SHARING PROJECTIONS

Each agreement contained a provision that requires the project's sponsor to share a percentage of the project's future income with SFC for a specified number of years. Although the act does not require profit sharing as a condition to a project's receiving SFC assistance, the act permits SFC to use the concept at its discretion. According to SFC, it has elected to include profit-sharing provisions as a means of offsetting the cost of price guarantee assistance. SFC could use profit-sharing revenues from

a project to repay any outstanding debts from SFC-guaranteed loans and to make future price guarantee payments relating to that project. Any remaining funds would be remitted to the U.S. Treasury and cannot be used to fund additional projects.

### Original profit-sharing projections

SFC's analysis of each project contained projections of the anticipated total price guarantee outlays and total profit-sharing receipts (gross profit-sharing revenues). These projections were based primarily on SFC's estimates of future energy prices and the project's profitability during the price guarantee and profit-sharing payment periods. Profit-sharing payments are made when the project's income or the market price of the synthetic fuel produced by the project exceeds negotiated levels stated in the letter of intent agreement. Table 2 compares SFC's gross profit-sharing revenue projections with the sponsors' projections at the time the proposed financial assistance agreements were signed or authorized.

Table 2

<u>Project</u>	Gross profit-sharing revenues (undiscounted)		
	<u>SFC's estimate</u>	<u>Sponsors' estimate</u>	<u>Difference</u>
	----- (millions) -----		
Great Plains	\$3,355.3	\$1,186.2	(\$2,169.1)
Union Oil Phase II	3,145.0	0	(3,145.0)
Cathedral Bluffs	695.1	0	(695.1)
Northern Peat	250.7	73.8	(176.9)
Forest Hill	13.1	5.0	(8.1)
Seep Ridge	<u>9.6</u>	<u>10.4</u>	<u>.8</u>
 Total	 <u>\$7,468.8</u>	 <u>\$1,275.4</u>	 <u>(\$6,193.4)</u>

According to SFC finance officials, the difference between SFC's estimates and project sponsors' estimates was due primarily to two projects' sponsors--Great Plains and Union Oil Phase II--anticipating no real growth in energy prices and the other four projects' sponsors projecting lower future energy prices than SFC.

Comparison of SFC's original  
projections and January 1985  
projections

As shown in table 2, SFC originally expected gross profit-sharing revenues to total about \$7.5 billion for the six projects. In January 1985 SFC reanalyzed its projections using lower estimates for future energy prices and revised its gross profit-sharing revenue estimate downward \$1.5 billion to about \$6 billion, as shown in table 3.

Table 3

<u>Project</u>	Gross profit-sharing revenues (undiscounted)		
	<u>Original estimate</u>	<u>January 1985 estimate</u>	<u>Difference</u>
	----- (millions) -----		
Great Plains	\$3,355.3	\$2,911.0	(\$ 444.3)
Union Oil Phase II	3,145.0	1,927.4	(1,217.6)
Cathedral Bluffs	695.1	891.5	196.4
Northern Peat	250.7	211.7	(39.0)
Forest Hill	13.1	9.3	(3.8)
Seep Ridge	<u>9.6</u>	<u>13.3</u>	<u>3.7</u>
Total	<u>\$7,468.8</u>	<u>\$5,964.2</u>	<u>(\$1,504.6)</u>

SFC originally estimated that net profit-sharing revenues could be about \$1.7 billion (the difference between the \$7.5 billion estimated gross profit-sharing revenues and the \$5.8 billion estimated price guarantee outlays shown in table 1 on p. 3). SFC's January 1985 analyses indicated that the federal government could receive about \$1.7 billion less in net profit-sharing revenues than originally anticipated. It also indicated that, through profit sharing, SFC could recover all but \$18.8 million of the expected price guarantee outlays. A comparison of SFC's original and January 1985 net profit-sharing revenue estimates is shown in table 4.

Table 4

<u>Project</u>	Net profit-sharing revenues (undiscounted)		
	<u>Original estimate</u>	<u>January 1985 estimate</u>	<u>Difference</u>
----- (millions) -----			
Great Plains	\$2,565.3	\$2,121.0	(\$ 444.3)
Union Oil Phase II	445.0	(772.6)	(1,217.6)
Cathedral Bluffs	(1,121.8)	(1,131.6)	(9.8)
Northern Peat	(114.3)	(153.3)	(39.0)
Forest Hill	(46.9)	(50.6)	(3.7)
Seep Ridge	<u>(34.9)</u>	<u>(31.7)</u>	<u>3.2</u>
Total	<u>\$1,692.4</u>	<u>(\$18.8)</u>	<u>(\$1,711.2)</u>

Present-discounted value of SFC's  
January 1985 projections

Because money received today is worth more than money received in the future, taking the time value of money under consideration--present-discounted value analysis<sup>1</sup>--provides a more germane perspective on the federal government's potential financial return from the six projects. Therefore, we converted SFC's January 1985 projected price guarantee outlays of \$5.983 billion and gross profit-sharing revenues of \$5.964 billion, as shown in tables 1 and 3, into their present-discounted values. Our conversion showed that the price guarantee outlays would be equivalent to about \$2.736 billion and the gross profit-sharing revenues would be equivalent to about \$859 million.

On the average, price guarantee assistance would be expended within a project's first 8 years of operation, while profit-sharing payments to the federal government would not begin until

<sup>1</sup>The present-discounted value of a future payment or receipt is the amount of money that, if invested today at a specified interest rate (called the discount rate), would grow to equal that future payment or receipt. We used the 30-year Treasury bond rate for January 1981 (12.14 percent) as the discount rate for the present-discounted value analysis, as discussed on p. 15.

10 years after operations. About \$4.5 billion, or 76 percent of the anticipated profit-sharing revenues for the six projects, would be paid to the government between the years 2000 and 2009. Our analysis showed that the price guarantee payments that sponsors could receive during the early years of the projects are worth more than the profit-sharing revenues the government could receive in the future. When the near-term cost of price guarantee payments is discounted and deducted from the discounted profit-sharing revenues expected in the future, the government could receive about \$1.9 billion less than it paid out in price guarantees using SFC's January 1985 estimates. Table 5 shows the differences (net subsidy from price guarantee assistance) for the six projects.

Table 5

<u>Project</u>	<u>Present-discounted values</u>		
	<u>Gross profit-sharing revenues</u>	<u>Price guarantee outlays</u>	<u>Net subsidy from price guarantee assistance</u>
	----- (millions) -----		
Great Plains	\$415.9	(\$ 642.2)	(\$ 226.3)
Union Oil Phase II	302.4	(1,100.5)	(798.1)
Cathedral Bluffs	114.8	(784.3)	(669.4)
Northern Peat	21.1	(139.2)	(118.0)
Forest Hill	1.6	(40.0)	(38.4)
Seep Ridge	<u>2.9</u>	<u>(30.1)</u>	<u>(27.1)</u>
Total	<u>\$858.7</u>	<u>(\$2,736.3)</u>	<u>(\$1,877.3)</u>

TAX IMPLICATIONS

We determined, on the basis of SFC's January 1985 analyses, that the six projects could provide the U.S. Treasury with \$7.16 billion in net revenues after tax factors (such as tax benefits and project income taxes) are considered. We computed this figure by combining the anticipated net federal revenues from the projected income taxes of project sponsors, as provided by SFC, with the government's anticipated net profit-sharing revenues that we had computed earlier. The results are shown in table 6.

Table 6Calculation of net Treasury revenues  
(undiscounted)

<u>Project</u>	<u>Net project income taxes</u>	<u>Net profit- sharing revenues</u>	<u>Net Treasury revenues</u>
----- (millions) -----			
Great Plains	\$ 903.9	\$2,121.0	\$3,024.9
Union Oil Phase II	5,404.1	(772.6)	4,631.5
Cathedral Bluffs	671.9	(1,131.6)	(459.7)
Northern Peat	171.2	(153.3)	17.9
Forest Hill	52.5	(50.6)	1.9
Seep Ridge	<u>(24.8)</u>	<u>(31.7)</u>	<u>(56.5)</u>
Total	<u>\$7,178.8</u>	<u>(\$18.8)</u>	<u>\$7,160.0</u>

The calculation of net Treasury revenues from project income taxes considers the effects of tax credits and other tax benefits. Four projects expect to receive federal assistance through (1) production tax credits, (2) energy tax credits, and (3) investment tax credits. The other two projects expect to receive investment tax credits only. The project sponsors can use these tax credits to offset their tax liabilities accruing from income earned in other facets of their businesses. SFC's January 1985 analyses estimated that these tax credits could allow the project sponsors to reduce their future income taxes by about \$2.15 billion.<sup>2</sup> Two projects--Union Oil Phase II and Great Plains--could receive about \$1.67 billion, or about 78 percent, of the \$2.15 billion potential income tax savings available through the tax credits. These two projects are expected to produce about three-fourths of the total daily synthetic fuels production from the six projects.

SFC's analyses projected that the six projects could yield the federal government about \$9.33 billion before tax credits are considered and \$7.18 billion after tax credits over the projects' estimated useful lives are considered. Combined with the sponsors' profit-sharing payments (\$5.964 billion), the six projects

<sup>2</sup>Tax savings from energy tax credits, \$339.9 million; investment tax credits, \$644.9 million; and production tax credits, \$1,167 million.



could render the U.S. Treasury about \$13.14 billion. After the proposed price guarantee assistance expenditures are deducted (\$5.983 billion), the Treasury could net about \$7.16 billion.

Present-discounted value of the projects' net effect on the U.S. Treasury

Most tax benefits available to project sponsors are expended, like price guarantee payments, during projects' early years. For example, sponsors are eligible to receive investment tax credits (about \$645 million) during the projects' initial 3 to 4 years. However, the federal government would not receive most of the additional income tax revenues, just as it would not receive profit-sharing payments, until the projects' later years. According to our calculations, the tax benefits the projects could receive are worth more than the \$7.18 billion the federal government could receive in additional income tax revenues. In present-discounted value terms, the federal government would receive about \$884 million less in income tax receipts than it would grant in tax benefits.

When the \$884 million tax subsidy is combined with the \$1.9 billion net subsidy from price guarantee assistance (see table 5), the six projects could receive a total subsidy of about \$2.8 billion in present-discounted value terms, as shown in table 7.

Table 7

<u>Project</u>	<u>Net Treasury revenue (undiscounted)</u>	<u>Net Treasury revenue (discounted)</u>
	----- (millions) -----	
Great Plains	\$3,024.9	(\$1,034.6)
Union Oil Phase II	4,631.4	(397.7)
Cathedral Bluffs	(459.7)	(1,163.0)
Northern Peat	17.9	(95.7)
Forest Hills	1.9	(27.4)
Seep Ridge	<u>(56.5)</u>	<u>(43.1)</u>
Total	<u>\$7,160.0</u>	<u>(\$2,761.5)</u>

Implications of using average  
effective tax rates

SFC used a statutory maximum corporate tax rate of 46 percent to project the financial feasibility of the six projects. However, the overall tax obligations of major corporations, such as synthetic fuels projects' sponsors, often represent a lower percent of total profits than the statutory maximum rate implies because of the corporations' use of various tax benefits.

To illustrate the effect on the net income tax revenues to the Treasury when a corporation's actual effective tax rate is used, we computed the average effective tax rates for a 3-year period for sponsors of two projects--Union Oil Phase II and Great Plains. We then had SFC substitute the Union Oil and Great Plains sponsors' average effective tax rates--27 and 32 percent, respectively, for 1982 through 1984--for SFC's maximum corporate 46-percent rate, and compared the results with SFC's projections. Under these assumptions, the Treasury could receive about \$3.2 billion in undiscounted net income tax revenues from the two projects instead of SFC's estimated \$6.3 billion, or a difference of about \$3.1 billion. The Treasury could receive about \$2.8 billion instead of \$5.4 billion from Union and about \$409 million instead of \$904 million from Great Plains.

SFC's Vice President-Finance and Treasurer, in transmitting the computer-generated financial spreadsheets for the two projects, commented upon our comparison of income tax rates:

"I understand that this request is premised upon the belief that the appropriate tax rate to use in the Corporation's financial analysis of projects is the sponsors' average effective tax rate over the last few fiscal years (in this instance, as calculated by your staff). We believe that this approach is incorrect and results in erroneous conclusions."

He distinguished between the effective tax rate and the applicable tax rate:

"The 1984 statutory federal tax rate for corporations with taxable income equal to or greater than \$1,405,000 is a flat 46% for all income. (A 46% incremental rate applies to income over \$100,000; there is an additional tax of 5% on income between \$1,000,000 and \$1,405,000; the combination has the effect of eliminating the graduated tax benefits for a

corporation with taxable income exceeding \$1,405,000.) Regardless of the effective tax rate (the percentage ratio of actual taxes paid to net income before taxes) which reflects the utilization of such items as tax credits and loss carryforward, the applicable federal tax rate for domestic corporations such as Union Oil Company and the sponsors of the Great Plains project is 46%. The effective tax rate being less than 46% implies only that various tax credits and other tax benefits were utilized by a corporation; the applicable tax rate for any incremental income, such as might result from investment in a synthetic fuel project, is 46%."

"Accordingly, we would suggest that the results indicated by the enclosed spreadsheets are in no way credible."

Our comparison was not intended to suggest that SFC use the effective tax rate when making financial analyses of proposed synthetic fuels projects. Rather, the analysis we were asked to perform was intended only to illustrate that if a corporate sponsor uses tax benefits from separate business activities to reduce its tax liabilities associated with the synthetic fuels project, the tax income to the Treasury could be less than that projected using the 46-percent rate.

#### ENERGY PRICE COMPARISONS

According to our analyses in previous reports,<sup>3</sup> the economic viability of synthetic fuels projects is extremely sensitive to anticipated market energy prices. Generally, if energy price assumptions are raised, estimated profit-sharing revenues would be increased; conversely, if energy price assumptions are lowered, estimated profit-sharing revenues would be decreased.

SFC projects its own future energy prices quarterly. SFC derives its projected market prices by combining numerous independent forecasts--Data Resources, Incorporated (DRI); Chase Econometrics; Wharton Econometrics; and others.

The most important market factors affecting SFC's price projections for synthetic fuels are

---

<sup>3</sup>(GAO/RCED-83-210, Aug. 24, 1983) and (GAO/RCED-85-70, Feb. 21, 1985).

- refiners' costs to acquire crude oil (a composite of domestic and foreign oil),
- the price of natural gas, and
- the price of residual fuel oil.

We compared SFC's January 1985 energy price projections with the projections of three private forecasters--DRI, Chase, and Wharton--and with DOE's preliminary 1985 projections. All of these projections were based on current dollars which include the effects of inflation. We focused on the projected price differences for each year of the respective forecast periods.<sup>4</sup> Our comparison showed that SFC's price projections were generally much higher than the others.<sup>5</sup>

SFC's price projections of refiners' costs to acquire crude oil exceeded DRI's, Wharton's, and Chase's projections by an average of 24, 30, and 48 percent, respectively. Regarding natural gas, SFC's price projections exceeded DRI's, Wharton's, and Chase's by an average of 49, 89, and 82 percent, respectively. For residual fuel oil, SFC's average price projections exceeded DRI's by 26 percent and were about equal to Wharton's. Projections for residual fuel oil prices are not available from Chase.

SFC's energy price projections exceeded DOE's preliminary 1985 projections by an average of 16 percent for refiners' costs to acquire crude oil. DOE's preliminary 1985 price projections for natural gas and residual fuel oil were not available.

---

<sup>4</sup>Chase and Wharton's projections were based on information gathered during the last quarter of 1984; DRI projections were based on information gathered during the first quarter of 1985. The comparison periods are as follows: SFC 1985-2009; DRI 1985-2009; Chase 1985-2000; Wharton 1985-2005; and DOE 1985-2000.

<sup>5</sup>SFC in a July 1, 1985, letter stated that its energy price projections prepared in March 1985 were more in line with comparable forecasts of the three private firms and DOE. We did not validate SFC's energy price comparisons using its March 1985 forecast. It should be noted that lower SFC energy price projections would result in lower estimated profit-sharing receipts than those used in this report.

- - - -

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of the report. At that time we will send copies to SFC and interested parties and make copies available to others upon request.

Sincerely yours,



J. Dexter Peach  
Director

OBJECTIVES, SCOPE, AND METHODOLOGY

On October 26, 1984, the Chairman, Subcommittee on Environment, Energy, and Natural Resources, House Committee on Government Operations, requested that we review the Synthetic Fuels Corporation's (SFC's) methodology for estimating federal receipts anticipated from profit-sharing provisions in proposed financial assistance agreements between SFC and sponsors of synthetic fuels projects. As a result of subsequent discussions with the Chairman's office, we agreed to

- compare SFC's original profit-sharing revenue projections with the sponsors' projections for six projects;
- compare SFC's original profit-sharing revenue projections with its January 1985 revenue projections;
- convert the January 1985 profit-sharing revenue projections into their present-discounted value;
- compute the potential net effect on the U.S. Treasury that could result from the proposed financial assistance agreements by considering federal outlays from price guarantee payments, project tax credits, and federal receipts from profit sharing and project income taxes (also converted into present-discounted value);
- compare SFC's income tax projections for two projects, which were based on the 46-percent maximum corporate tax rate, with revised projections that use the sponsors' average effective tax rates for the 3-year period 1982 through 1984; and
- compare SFC's future energy price forecasts with forecasts by recognized econometric firms and the Department of Energy (DOE).

To achieve these objectives, we interviewed SFC officials, examined the six proposed financial assistance agreements, reviewed SFC's computer-based analyses used to support the assistance proposals, and obtained corporate tax information on two projects' sponsors from the Securities and Exchange Commission. At our request, SFC reanalyzed the six financial assistance agreements using its computer model and January 1985 energy price forecasts and other economic assumptions.

In addition to reviewing SFC's computer-based analyses, we reviewed those portions of SFC's model which calculate revenue or profit sharing and tax effects. We reviewed the model to enhance our understanding of, and confidence in, the model's output data

used in this report. We did not attempt to validate SFC's computer model, but rather, reviewed the assumptions implicit in various input data values, such as inflation rates, plant operating efficiencies, and energy prices. We also "flow-charted" the model's logic and traced specific model calculations in the selected model components under review. Similar portions of SFC's model were reviewed at the point in time that each project was being modeled.

Within the limits of our review, no major problems existed (this does not attest to the validity of the model). SFC's model is generic and is used for analyzing all projects. Only limited portions of the model specifically relate to a particular project. The profit sharing and tax calculations were consistent for the projects reviewed. Since projects were analyzed at different times, SFC made some relatively minor changes to the model during that period. SFC consistently applied such changes to all projects being analyzed at the time they occurred.

In negotiating the financial assistance packages, SFC used a computer model to, among other things, approximate the financial returns accruing to the project sponsors from different amounts of assistance. Since SFC updates each quarter the economic assumptions it uses in its base-case computer analysis (called the median-case scenario), we had SFC reanalyze the six proposals using the economic assumptions it developed in January 1985. We compared these results with the original median-case analyses prepared at the time the letters of intent were authorized.

In accordance with our policy and the Chairman's request, we analyzed the returns from profit sharing based on the time value of money. The results of our analyses are expressed in both current and present-discounted values. The present-discounted value essentially converts the cash outlays and receipts resulting from investments that occur at different times into comparable form--their present-value equivalent. In calculating the present-discounted values, we used the yield on outstanding Treasury obligations with maturities comparable to the analysis period. In this case we used the 30-year Treasury bond rate for January 1981 published in the Federal Reserve Bulletin (12.14 percent) as the discount rate. The 1981 Treasury bond compares to the investment period of the longest project, Great Plains, 29 years (1981-2009). The investment period (or the analysis period) begins when price guarantee payments and/or project-related tax credits are granted and extends through the project's expected operating life. All relevant outlays and receipts were adjusted by 12.14 percent to reflect their 1985 values.

SFC's year-by-year analyses of the projects' finances use current year dollars that include the effects of inflation. SFC

calculates the present-discounted value by first adjusting current dollar amounts to real dollars and then discounting the amounts by 10 percent which, according to SFC, is the methodology prescribed by the Office of Management and Budget.

Although it is customary to use different discount rates for analyzing projects having dissimilar investment periods, in the interest of clarity, a single rate is used in this presentation. A single rate is suitable because the projects all begin and end within 3 to 4 years of each other. Consequently, the results do not vary significantly from those that would be attained from using separate rates.

In computing the potential net effect of the six proposed financial assistance agreements on the U.S. Treasury, we weighed the value of all major federal cash outflows (price guarantee payments) and tax credits against all major federal cash inflows (profit-sharing revenues and project income tax proceeds). Once again our results--based on SFC's data--are shown in both current and present-discounted values.

SFC's analyses assume the maximum corporate income tax rate, 46 percent, for each project. To illustrate the effect on the Treasury of lower effective tax rates, we researched the tax payment histories of the parent companies for two of the six projects--Union Oil Phase II and Great Plains. Union Oil Phase II was selected because it involved the largest proposed award. Great Plains was selected at the direction of the Chairman's office. We computed the parent companies' average federal tax obligation for the 3-year period 1982-84, and in a separate computer analysis, had SFC incorporate these values into the median-case analysis for each project. The results are given in current values.

Our previous reports on the Great Plains' project indicated that future energy price assumptions are critical in determining the economic viability of synthetic fuels projects. Given the significance of energy price assumptions, we determined how SFC's assumptions compared with other forecasting authorities. We obtained energy price projections from three recognized economic forecasting firms--Data Resources, Incorporated, Chase Econometrics, and Wharton Econometrics--and compared their forecasts with SFC's. We also compared SFC's energy price projections with DOE's.

Our work was performed in accordance with generally accepted government auditing standards. The views of directly responsible officials were sought during our work and are incorporated in the report where appropriate. In accordance with the requester's wishes, we did not request that SFC review and comment officially on a draft of this report.